

SEQUENCE LISTING

<110> Natalia Viktorovna STOYNOVA

Elena Viktorovna SYCHEVA

Aleksandra Yurievna SKOROKHODOVA

Yuri Ivanovich KOZLOV

<120> Method for producing L-amino acid using bacterium, belonging to the
genus Escherichia, lacking active mlc gene

<130>

<150> RU 2002123822

<151> 2002-09-06

<160> 7

<170> PatentIn version 3.1

<210> 1

<211> 64

<212> DNA

<213> Artificial

<220>

<223> artificial

<400> 1

agacgaatca acaaagaacc gttatacatc gcgtctatac ctgtgacgga agatcacttc 60

gcag 64

<210> 2

<211> 63

<212> DNA

<213> Artificial

<220>

<223> artificial

<400> 2

cggagcgcga aaatataggg agtatgcggt gggtgcaatt acgccccgcc ctgccactca 60

tgc 63

<210> 3

<211> 935

<212> DNA

<213> Escherichia coli

<400> 3

agacgaatca acaaagaacc gttatacatc gcgtctatac ctgtgacgga agatcacttc 60

gcagaataaa taaatcctgg tgtccctggt gataccggga agccctgggc caacttttgg 120

cgaaaatgag acgttgatcg gcacgtaaga ggttccaact ttcaccataa tgaaataaga 180

tcactaccgg gcgtatTTTT tgagttatcg agattttcag gagctaagga agctaaaatg 240

gagaaaaaaa tcactggata taccaccggt gatatatccc aatggcatcg taaagaacat 300

tttgaggcat ttcagtcagt tgctcaatgt acctataacc agaccgttca gctggatatt 360

acggcctttt taaagaccgt aaagaaaaat aagcacaagt tttatccggc ctttattcac 420

attcttgccc gcctgatgaa tgctcatccg gaattccgta tggcaatgaa agacggtgag	480
ctggtgatat gggatagtgt tcacccttgt tacaccgttt tccatgagca aactgaaacg	540
ttttcatcgc tctggagtga ataccacgac gatttccggc agtttctaca catatattcg	600
caagatgtgg cgtgttacgg tgaaaacctg gcctatttcc ctaaagggtt tattgagaat	660
atgtttttcg tctcagccaa tccctgggtg agtttcacca gttttgattt aaacgtggcc	720
aatatggaca acttcttcgc ccccgttttc accatgggca aatattatac gcaaggcgac	780
aaggtgctga tgccgctggc gattcaggtt catcatgccg tctgtgatgg ctcccatgtc	840
ggcagaatgc ttaatgaatt acaacagtac tgcgatgagt ggcagggcgg ggcgtaattg	900
caaccaccgc ataactcccta tatttttcgcg ctccg	935

<210> 4

<211> 19

<212> DNA

<213> Artificial

<220>

<223> artificial

<400> 4

cagaagtgtc tgtaccggt

19

<210> 5

<211> 21

<212> DNA

<213> Artificial

<220>

<223> artificial

<400> 5

aatgtgctgt taatcacatg c

21

<210> 6

<211> 1492

<212> DNA

<213> Escherichia coli

<400> 6

cagaagtgtc tgtaccggtataaaagaaac gcttcagcat cactaactcc accgttatgc 60

ttcacaaata taaaccagga aaataattaa ccttgaaagt ctaagttatg ctttcctggc 120

ccaaattgag atagcgcaaa ttttggtaga acagttaaaa aatgttaacc ctgcaacaga 180

cgaatcaaca aagaaccggt atacatcgcg tcttttacca gtgcagcgcc tgccatcgtg 240

ccctggttag aaaactgagt actctcaacg ctgatgtgct gactatacgc aggaagggcc 300

tgctgacgga tgctgtctga gatgaccggg aagaggatat ctgccgcttt acttaacggt 360

gagccaatca gtatTTTTTg tgggttaaataaattcacca tgatggcaag aatgcgcccg 420

acatgcgcgc ccaccccggt aatgatgtct ttgcccagta gatcgccgcg caatgccgcc 480

tgacacaatg agtccacggt taacggttgt ccatgtaaca tcgagctcat ggattgatta 540

agacgcagct gtgccagctc aagaatactg tccacgctgg cgatggtttc gaggcagccg	600
tgattcccgc aataacagcg tttcccatac gggtcgacct gtgtgtggcc tatttccacg	660
agactactgc tgcctgcgtg tagcagatga ccatcggtaa tgacgcccgc cccacgttg	720
tgatcgataa ccacctgaat cacatcgcgc gccccgcgtg aggcaccaa caaggcctct	780
gccatcgctc atgcgctgat atcatgctga atataaacg gaacgccggt atgctgctcc	840
agcgctcgc cgagcggcat ctctttttaca tcctcgtaga acggcatgcg atgtacaata	900
ccattttccg tatcaataat tcccggcaag gttatggcaa tcgaagttag acgctcaagt	960
tttttctggt ggcgataaaa aaactgatcg atatgggaaa taatacgatc cagcaatggc	1020
aagtcattctt ttaacgccag ttcttgcgac tcttccacca ccagtttgct gctcagatcg	1080
cgcagagcaa ggaaaatctc cccgcgacta atgcgcagag aaagatagtg ccaggcttca	1140
gtttcaacca ccagccccac cgccggacgg ccacggttcc ccgcttcttt gatttccagc	1200

tcttgacca ggtgtgcttc gagcatctca cggacaattt tagtgatact ggcaggagcc 1260

agttgcgcca gacgggaaag atcgatacgc gagactggac caagctgac aatcaggcga 1320

taaaccgcgc ccgcgttggt ctgctttatt tgatcaatgt gccaggctg gttttcagca 1380

accaccgcat actccctata ttttcgcgct ccgaaataat ctgtaggcta tggatgaagca 1440

cttcaatacg tgtcgtcaaa tttttactta ggcatgtgat taacagcaca tt 1492

<210> 7

<211> 1191

<212> DNA

<213> Escherichia coli

<400> 7

cagaagtgtc tgtaccggtg ataaagaaac gcttcagcat cactaactcc accgttatgc 60

ttcacaata taaaccagga aaataattaa ccttgaaagt ctaagttatg ctttcctggc 120

ccaaattgag atagcgcaaa ttttggtaga acagttaaaa aatgttaacc ctgcaacaga 180

cgaatcaaca aagaaccgtt atacatcgcg tctatacctg tgacggaaga tcacttcgca 240

gaataaataa atcctggtgt ccctgttgat accgggaagc cctgggcca cttttggcga 300

aaatgagacg ttgatcggca cgtaagaggt tccaacttcc accataatga aataagatca 360

ctaccgggcg tattttttga gttatcgaga ttttcaggag ctaaggaagc taaaatggag 420

aaaaaaatca ctggatatac caccgttgat atatcccaat ggcatcgtaa agaacatttt 480

gaggcatttc agtcagttgc tcaatgtacc tataaccaga ccgttcagct ggatattacg 540

gcctttttta agaccgtaaa gaaaaataag cacaagtttt atccggcctt tattcacatt 600

cttgcccgcc tgatgaatgc tcatccggaa ttccgtatgg caatgaaaga cggtagagctg 660

gtgatatggg atagtgttca cccttggtac accgttttcc atgagcaaac tgaaacgttt 720

tcatcgctct ggagtgaata ccacgacgat ttccggcagt ttctacacat atattcgcaa 780

gatgtggcgt gttacgggtga aaacctggcc tatttcccta aagggtttat tgagaatatg 840

tttttcgtct cagccaatcc ctgggtgagt ttcaccagtt ttgatttaaa cgtggccaat 900

atggacaact tcttcgcccc cgttttcacc atgggcaaatt attatacgca aggcgacaag 960

gtgctgatgc cgctggcgat tcaggttcat catgccgtct gtgatggctt ccatgtcggc 1020

agaatgctta atgaattaca acagtactgc gatgagtggc agggcggggc gtaattgcaa 1080

ccaccgcata ctccctatat tttcgcgctc cgaaataatc tgtaggctat ggtgaagcac 1140

ttcaatacgt gtcgtcaaatt ttttacttag gcatgtgatt aacagcacat t 1191